

Item #6.e  
6/2/2022

***South Linden Avenue and  
Scott Street Grade  
Separation (LSGS)***

**Preliminary Design  
Refinement 2D**

***May 28, 2026***





## Agenda

1. Introduction
2. Project overview
3. Design Refinement 2D ( 2C with 2WB lanes)
4. Feedback and next steps

# Project Location and Partners

Caltrain is managing the Preliminary Engineering (35%) Design and Environmental Clearance. RSE is prime design consultant

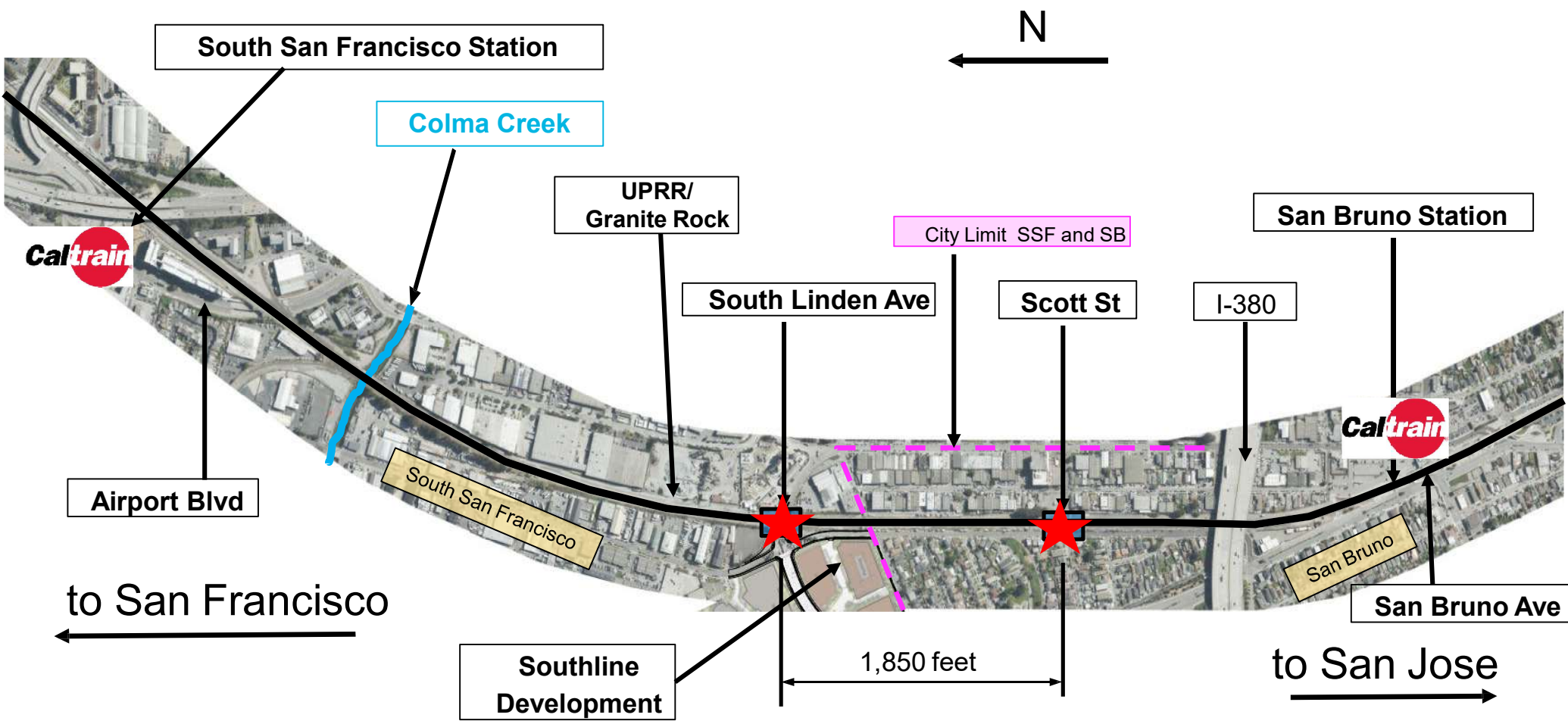


Project Location





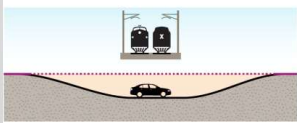

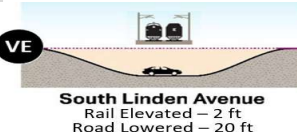

# Project Location





# Value Engineering – Optimized Alternative

**Jacked (push) Boxes Beneath Railroad  
Preferred Alternative Selected by Caltrain and Cities in Feb. 2025**

| Alt              | South Linden Avenue   | Scott Street   |
|------------------|---|--|
| <b>Preferred</b> |  <ul style="list-style-type: none"> <li>▪ Rail Elevated</li> <li>▪ Roads Lowered</li> </ul>  |  <ul style="list-style-type: none"> <li>▪ Rail Elevated</li> <li>▪ Road Closed</li> <li>▪ Ped/Bike Tunnel</li> </ul>    |
| <b>Optimized</b> |  <p>South Linden Avenue<br/>Rail Elevated – 2 ft<br/>Road Lowered – 20 ft</p> <ul style="list-style-type: none"> <li>▪ Rail At-Grade</li> <li>▪ Roads Fully Lowered</li> </ul> |  <ul style="list-style-type: none"> <li>▪ Rail At-Grade</li> <li>▪ Road Closed</li> <li>▪ Ped/Bike Crossing*</li> </ul> |

## Project Schedule

| Project Activities  | Start Date | Expected Completion |
|---|------------|---------------------|
| Updated Preliminary Engineering/Environmental Clearance Schedule (35% design) | Feb 2026   | June 2027           |



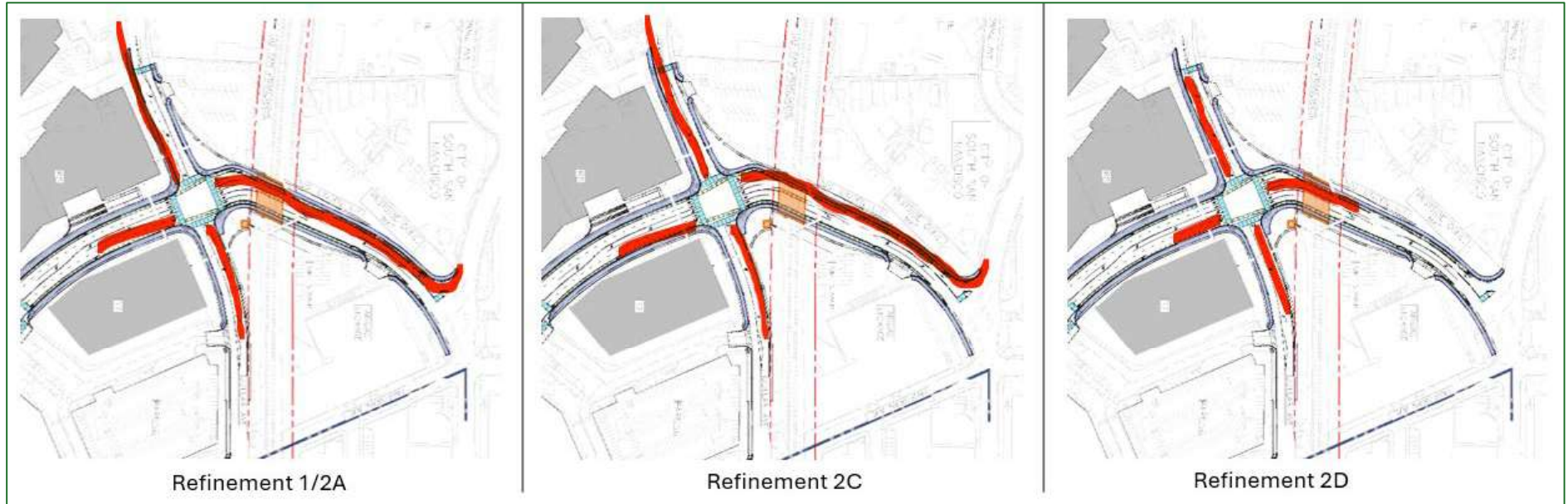
# Design Refinement (DR) Matrix



| DR# | Key Element   | Box Size              | Decision/ Status  |
|-----|---|-----------------------|---|
| 1   | OA Base Design<br><ul style="list-style-type: none"> <li>- 2 lane E and 1 lane W at Linden Box</li> <li>- Bike lane and sidewalk elevated from Linden to San Mataeo Ave</li> <li>- Bike lane and sidewalk jacent to road along Southline Ave</li> <li>- Ramp to Scott Underpass – full take of AT&amp;T parcel</li> </ul> | 84x23x60<br>(115,920) | No comment from SSF   |
| 2A  | Removal of Maintenance Road   | 84x23x45<br>(86,940)  | No comment from SSF   |
| 2B  | Min. lane configuration at S. Linden  | 60x23x45<br>(62,100)  | <b>No Go per SSF, due to single EB WB Lane.</b>                       |
| 2C  | Pedestrian Overpass, Existing lane configuration at S. Linden   | 60x23x45<br>(62,100)  | Additional modification on overpass, sidewalk, need updated rendering |
| 2D  | Pedestrian Overpass, Improved lane configuration at S. Linden   | 72x23x45<br>(74,520)  | Consider “skylights” on Linden Box?                                   |
| 3   | Track Raise with OCS Replacement  | n/a                   | No comment from SSF   |
| 4   | Dollar/Linden/Southline Grade Separation  | 60x23x45              | <b>No Go per SSF due to impacts to traffic.</b>                       |
| 5   | Use of Petrucco Verona System   | 84x23x60              | <b>No Go per SSF due to impacts to roadway and driveway.</b>          |
| 6   | Box Jacking from West to East   | n/a                   | No comment from SSF   |
| 7   | Scott Underpass – Partial take of AT&T parcel   | 26x18x60              | No comment from SSF   |



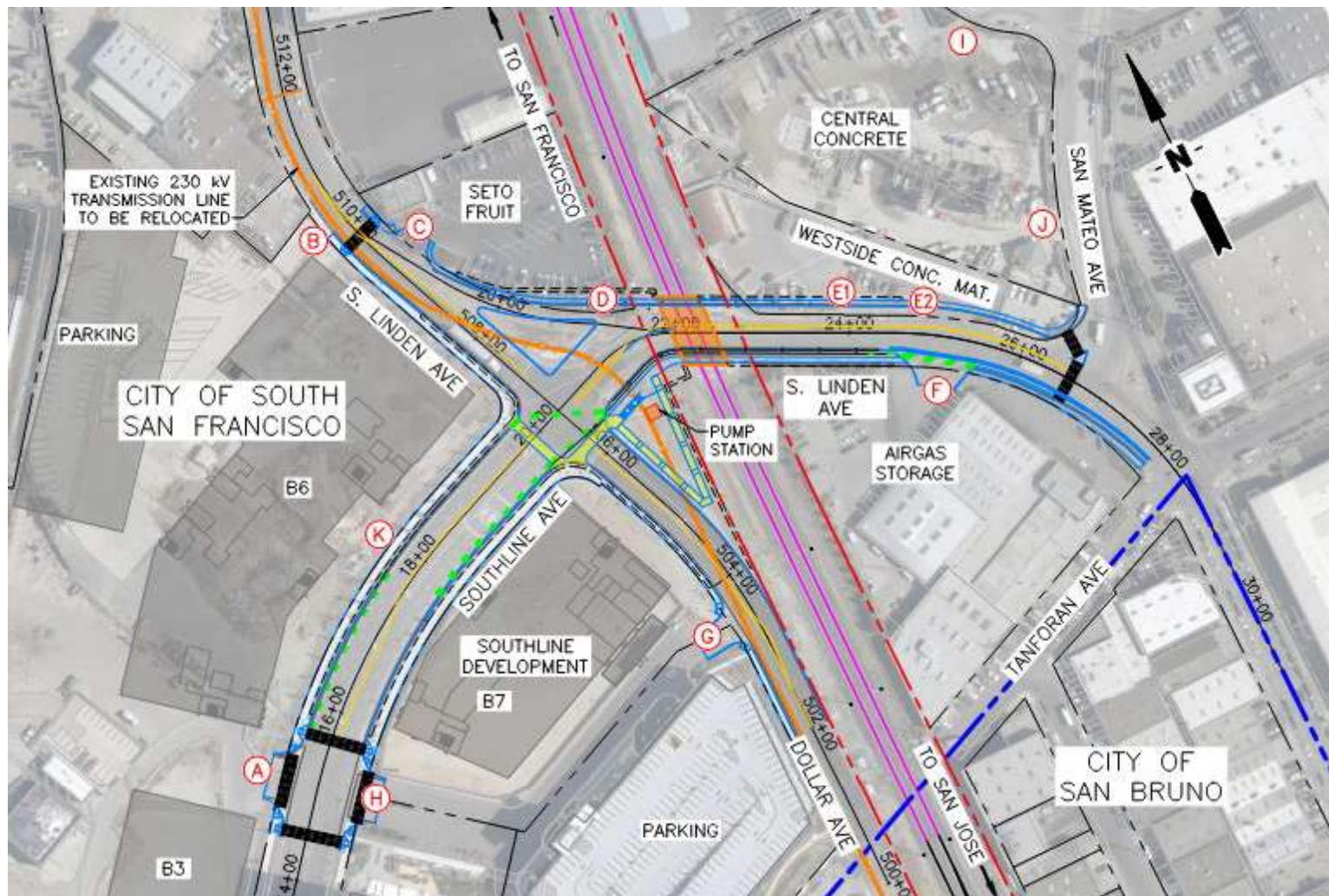
# Preliminary Traffic Analysis



- Refinement 1/2A – Longest queues; WB South Linden and SB Dollar are primary constraints.
- Refinement 2C – Shorter queues than 1/2A due to more green time, but queues remain substantial.
- Refinement 2D – Best performance; two WB lanes substantially reduce projected queues.



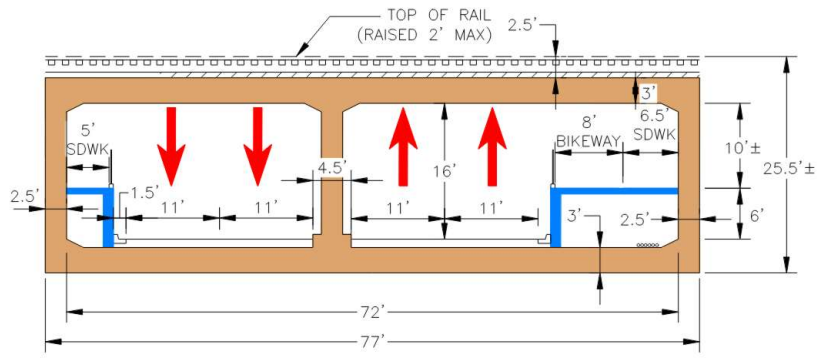
# DR2D – Pedestrian Overpass with 2 WB Lanes



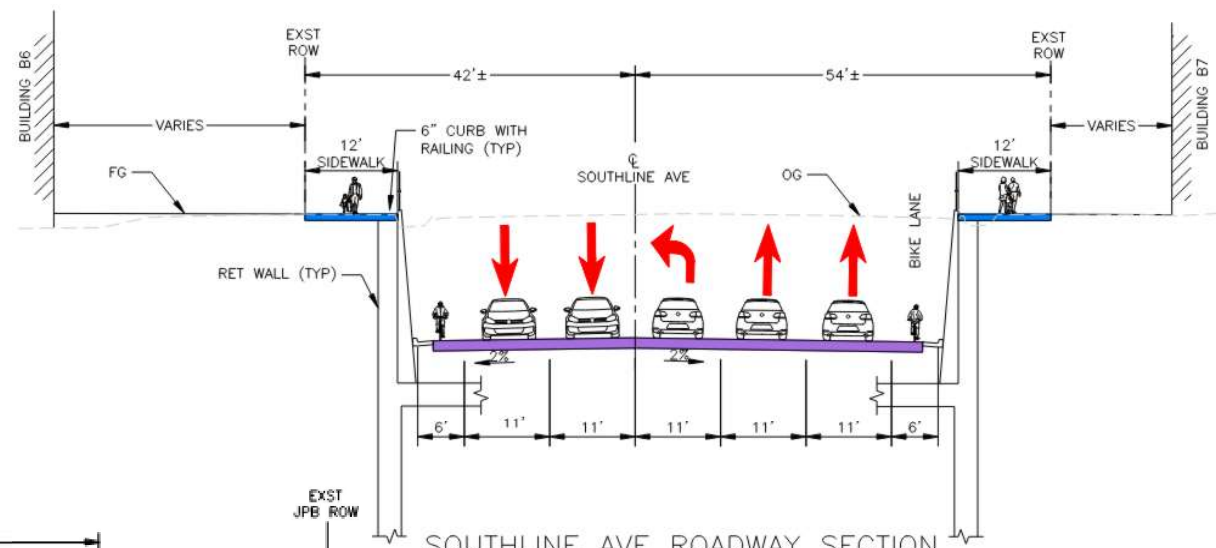
| Drwy | Lowered |
|------|---------|
| A/H  | 0       |
| E    | 1.2'    |
| F    | 0.3'    |
| G    | 0       |
| C    | 0       |
| B    | 0       |



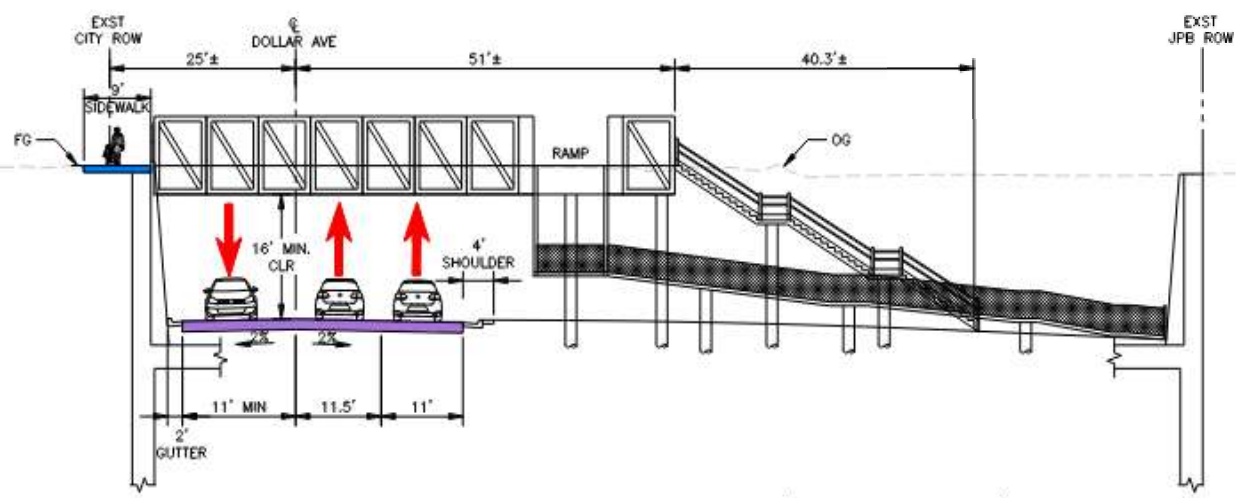
# DR2D – Sections



BOX SECTION AT S LINDEN AVE FACING EAST



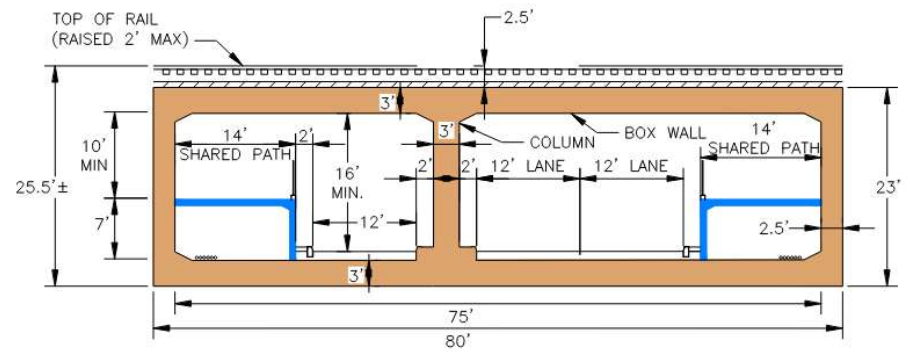
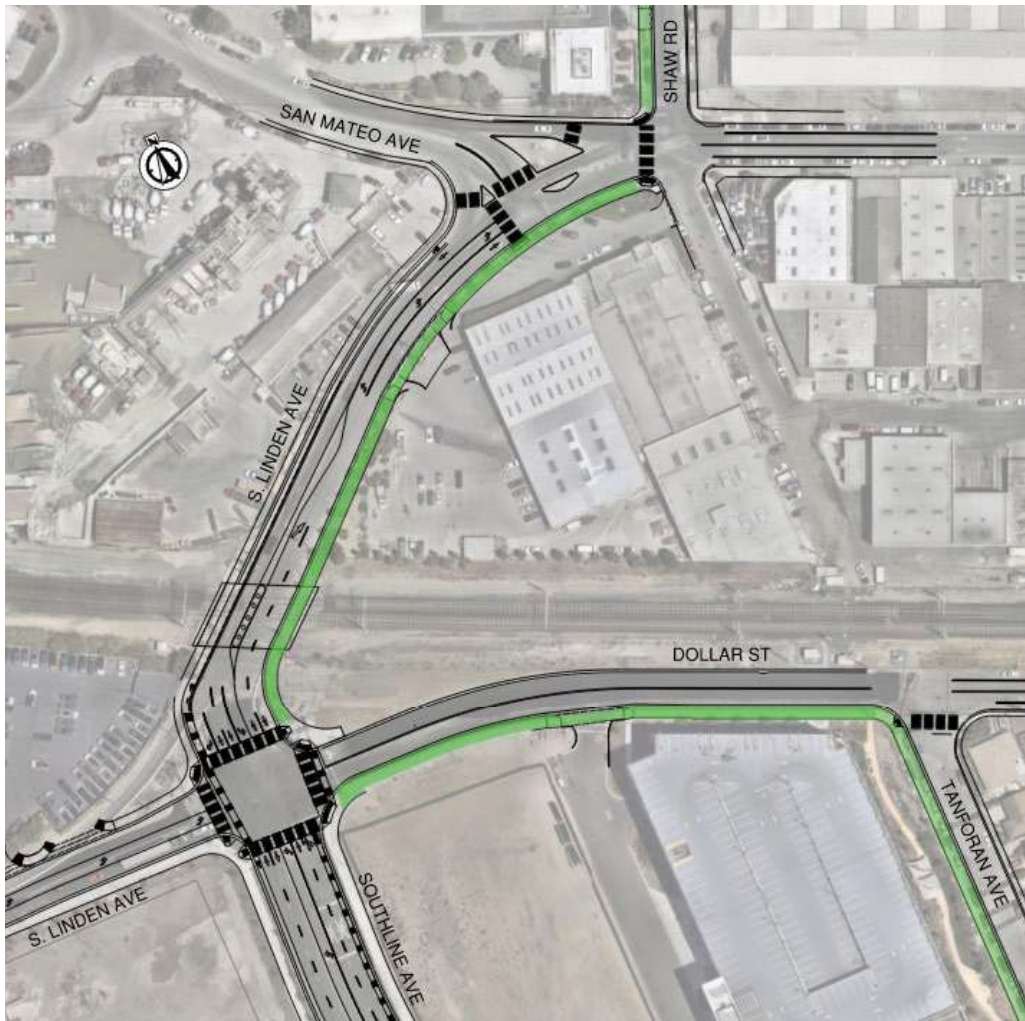
SOUTHLINE AVE ROADWAY SECTION LOOKING EAST



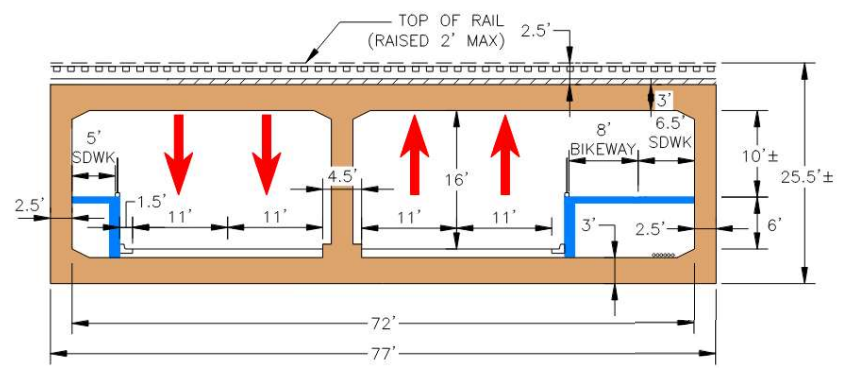
DOLLAR AVE ROADWAY SECTION (PED OVERPASS) FACING NORTH



# DR2D – Bicycle & Pedestrian Master Plan



BOX SECTION AT S LINDEN AVE  
FACING EAST  
Base Design



Design Refinement 2D



# DR2D Rendering – Aerial View Looking South





# DR2D Rendering – Aerial View Looking North





# DR2D Rendering – Ground View Looking East





# DR2D Rendering – Ground View at B6 Entrance





# DR2D Rendering – Ground View at Pedestrian Overpass





# DR2D Rendering – Driveway G on Dollar Ave





# DR2D Rendering – Ground View Looking West





# Open Discussion

## Next Step / Next Meeting